Seat No.: _____ **Enrolment No._____**

GUJARAT TECHNOLOGICAL UNIVERSITY
BE SEM-VI Examination-Nov/Dec-2011

Subject code: 162504 **Date: 30/11/2011**
Subject Name: Allied Manufacturing Processes
Time: 10.30 am -1.00 pm **Total marks: 70**

Instructions:
1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	Discuss the casting method for producing threads.	**07**
	(b)	Describe the essential parts of turret lathe. How does it differ from engine lathe?	**07**
Q.2	**(a)**	Explain the "Hot Rolling" method of gear manufacturing.	**07**
	(b)	Explain EDM process in brief. Compare ECM with EDM.	**07**
		OR	
	(b)	Explain laser beam machining with neat sketch. Give critical parameters of laser beam machining	**07**
Q.3	**(a)**	Discuss principle and working of Chrome platting process. Also give its advantages and limitations.	**07**
	(b)	Describe the construction and operation of a Swiss-type automatic screw machine.	**07**
		OR	
Q.3	**(a)**	Give the comparison of Zink platting and Dull platting processes considering working, application, advantages and limitations.	**07**
	(b)	Describe the indexing and locking operational cycle of a turret.	**07**
Q.4	**(a)**	Discuss compression Molding. Explain any two processes with neat sketch.	**07**
	(b)	Discuss the various gear finishing processes.	**07**
		OR	
Q.4	**(a)**	Differentiate between "Transverse thread grinding" and "Plunge cut grinding".	**07**
	(b)	Discuss Injection Molding process with neat sketch.	**07**
Q.5	**(a)**	Explain Plasma Arc Machining (PAM) with neat sketch. List characteristics of PAM processes.	**07**
	(b)	Describe a procedure for drawing of cams for turret type automatics.	**07**
		OR	
Q.5	**(a)**	Describe the following types of tape chasers: (i) Regular, (ii) over-hanging, (iii) circular	**07**
	(b)	Explain the process of gear extruding.	**07**

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